

**Patent claims**

1. Electronic control method for a slip-controlled motor vehicle brake system (1) featuring a distributor device (5) with an electronic unit (7, ECU) and a hydraulic unit (6, HCU) comprising a housing body for hydraulic elements, in particular, electrohydraulic inlet- und outlet valves (9,10) for wheel brakes (8) organized in brake circuits, and with a motor-pump-aggregate with electric motor (15), in particular, for redirecting hydraulic fluid from wheel brakes (8) in the direction of a pressure sensors (3), wherein an antilock control is facilitated through the build-up, maintenance and release of pressure in the electrohydraulic inlet and outlet valves (9, 10), while the admission pressure input by the driver is analyzed by means of the pressure sensor (3) in the brake system, **characterized by the fact** that
  - a) The electronic unit (7) supplies the motor (15) with defined electrical starting and/or shut-off phases for the purpose of controlling rotational speed,
  - b) A generator voltage generated by the motor (15) is tapped during a shut-off phase,
  - c) The generator voltage (15) is fed to the electronic unit (7), which estimates the admission pressure present in the brake system based on the determined generator voltage to

- d) Facilitate a reduced-noise triggering of the electrohydraulic valves (9).
2. Control method as claimed in Claim 1, **characterized by the fact** that the tapped generator voltage is examined in a defined time interval and analyzed to evaluate the coasting behavior of the motor-pump-aggregate, and that from the evaluated coasting behavior, the admission pressure load of the motor-pump-aggregate is determined.
3. Control method as claimed in Claim 2, **characterized by the fact that** the coasting behavior of the motor-pump-aggregate is evaluated through the analysis of the degree of generator voltage gradient within the defined time interval.
4. Control method as claimed in Claim 3, **characterized by the fact** that a time interval is defined through the equation  $\Delta t = a \cdot \text{loop time} - t_{\text{starting phase}}$
- with for example: loop time = 10 ms  
A = constant = 6  
 $T_{\text{starting phase}} = 30 \text{ ms}$ .
5. Control method as claimed in Claim 4, **characterized by the fact** that the formula  $t_{\text{starting phase}} < A \cdot \text{loop time}$  is used to calculate the time interval.

6. Control method as claimed in Claim 1, **characterized by the fact** that the generator voltage gradient is proportional to the rotational speed gradient.
7. Control method as claimed in Claim 1, **characterized by the fact** that the rotational speed gradient increases proportionally with admission pressure when the generator is operated.
8. Control method as claimed in Claim 1, **characterized by the fact that** the pulse widths of electric starting phases and/or shut-off phases are examined, and that for the tapping of generator voltage, shut-off phases are selected that share equal pulse width with one or more neighboring starting phases and/or shut-off phases.